UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 2 7 2019

REPLY TO THE ATTENTION OF
ECW-15J

CERTIFIED MAIL 7014 2870 0001 9581 1921
RETURN RECEIPT REQUESTED

Greenleaf Ledge Dairy, LLC
Attention: Ex. 6.(Personal Privacy)
1966 Days Street
Greenleaf, Wisconsin 54216

FOIA Ex. 6 (Personal Privacy)

Subject: Compliance Sampling Inspection

Dear Ex. 6.(Personal Privacy):

Enclosed, please find a copy of the U.S. Environmental Protection Agency Inspection Report for the inspection conducted by EPA at Greenleaf Ledge Dairy, LLC in Brown County, Wisconsin on May 9, 2019. The purpose of the inspection was to evaluate compliance with the Clean Water Act, as amended. Enclosed is a copy of EPA's inspection report.

Should you find anything in the report that you disagree with, please provide a detailed response.

If you have any questions, please contact Cheryl Burdett of my staff at (312) 886-1463 or by e-mail at burdett.cheryl@epa.gov.

Sincerely,

Ryan J. Bahr, Chief, Section 2
Water Enforcement and Compliance Assurance Branch

Enclosure

cc. Erin Carviou, WDNR
MaryAnne Lowndes, WDNR
Benjamin Uvaas, WDNR
Thomas Bauman, WDNR

CWA COMPLIANCE SAMPLING INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

Purpose:
Compliance Sampling Inspection

Facility:
Greenleaf Ledge Dairy, LLC
FOIA Ex. 6 (Personal Priacy)
Greenleaf, Wisconsin 54126
FOIA Ex. 6 (Personal Priacy)

NPDES Permit Number:
No NPDES Permit

Date of Inspection:
May 9, 2019

EPA Representatives:
Cheryl Burdett, CAFO Program Manager 312-886-1463
Burdett.cheryl@epa.gov

Benjamin Atkinson, Agronomist 312-353-8243
Atkinson.benjamin@epa.gov

State Representatives:
Erin Carviou, Wisconsin Department of Natural Resources 920-662-5419
Erin.carviou@wisconsin.gov

Facility Representatives:
Ex. 6.(Personal Privacy) Owner/Operator
Ex. 6.(Personal Privacy)
Ex. 6.(Personal Privacy) Owner

Ex. 6.(Personal Privacy)

Report Date: 6/27/19

Inspector Signature: _____

Approver Name and Title: Ryan Bahr, Chief, Water Enforcement and Compliance Assurance Branch, Section 2

Approver Signature: _____

Approval Date: 6/27/19

BACKGROUND

The United States Environmental Protection Agency and the Wisconsin Department of Natural Resources (WDNR) arrived on May 1, 2019 at Greenleaf Ledge Dairy, LLC (Greenleaf) in Brown County, Wisconsin at approximately 9:00 a.m. EPA was met by Ex. 6 (Personal Privacy) Owner/Operator of Greenleaf, to whom EPA presented their credentials. After EPA presented credentials to the Owner/Operator, the Owner/Operator stated that he was not sure who we were and did not want to allow EPA and WDNR on the facility. EPA explained that the authority to conduct inspections at Concentrated Animal Feeding Operation (CAFO) comes from Section 308 of the Clean Water Act. Ex. 6 (Personal Privacy) explained that he is a small operation. EPA explained that an Animal Feeding Operation with 200 or more milking and/or dry cows, if discharging to a water of the United States through a man-made conveyance, would be defined as a CAFO.

During the discussion, EPA expressed concern about the Vegetated Treatment Area (VTA). EPA previously inspected several CAFOs with VTAs in northeast Wisconsin and found issues with the VTAs discharging pollutants to waters of the United States. The Owner/Operator stated that he was "down two people and was up all-night milking cows" and did not have time to let us on the site. EPA said that with his permission, EPA could walk-through the facility and contact him after the walk-through was completed. The Owner/Operator said that he needed to walk with us and that he still is not sure who we were. Again, EPA stated that they were EPA inspectors and mentioned that if he had a consultant he could contact his consultant to verify that EPA has been conducting inspections in this area. The Owner/Operator stated that he was going to contact his attorney. EPA waited at the vehicle until the Owner/Operator returned. After a period of time, the Owner/Operator returned and provided EPA with the phone numbers for his attorney, Mr. David Crass. EPA, after receiving the numbers for Mr. Crass contacted EPA's Office of Regional Counsel, EPA's attorney stated that they would not be getting on-site today, and they should leave. EPA and WDNR left the site on May 1, 2019. EPA's attorney scheduled an inspection with Greenleaf's attorney, Mr. Crass, to conduct the inspection on May 9, 2019 at 10:00 a.m.

1. SITE INSPECTION

Table 1: Site Entry and Opening Conference

Date/Arrival Time:	May 9, 2019/10:00 a.m.
Temperature:	50 degrees F.
Precipitation:	Light rain.
Presented credentials?	10:05 a.m.
Credentials presented to whom and at what time?	Ex. 6.(Personal Privacy)

EPA arrived at Greenleaf located in Brown County, Wisconsin at 10:00 a.m. on May 9, 2019 and donned their yellow, rubber boots. The Owner/Operator met EPA and WDNR at their vehicles at approximately 10:05 a.m. and EPA presented their credentials. EPA stated that they wanted to walk-through the production area and then go through EPA's Region 5 CAFO checklist. The Owner/Operator stated that the checklist was going to be done first and then walk-through only the specific areas mentioned on May 1, 2019. EPA agreed to do the checklist first and the Owner/Operator led EPA to the office to go through the checklist. EPA used an aerial photo to specify the areas within the production area that EPA would walk-through to conduct a thorough inspection. EPA was told by the Owner/Operator that they could only walk-through the areas that EPA had mentioned on May 1, 2019. EPA tried to explain that the VTA and the dredged ditch were areas that EPA identified as the purpose for the inspection, but EPA would need to conduct a whole production area inspection to verify all areas are being managed appropriately to prevent discharges to waters of the United States. The Owner/Operator explained he was advised by his attorney, Mr. Crass to only grant EPA access to specific areas that EPA had mentioned as areas of concern on May 1, 2019. EPA contacted its attorney and explained that EPA was being denied access to parts of the production area at Greenleaf. EPA's attorney said that he would contact Greenleaf's attorney to discuss the situation of granting EPA access to the entire production area.

As EPA was waiting to hear back from its attorney, they continued with the inspection. EPA explained its inspection process; asking questions from the Region 5 CAFO checklist and then conducted a walk-through of the production area including taking pictures. EPA explained that if they observed uncontained contaminated runoff from the production area, they would need to collect samples from that area. EPA explained that if they did collect samples, they could do split samples with the facility. The Owner/Operator requested to split samples. EPA explained to the Owner/Operator that EPA would preserve the nutrient samples with sulfuric acid, fill out a chain of custody and provide the holding times for the parameters. EPA explained that any samples would need to be kept on ice until delivered to the laboratory and that specific holding times were required to be met for the parameters that were going to be analyzed. EPA explained that the Owner/Operator would have to incur the cost of the analysis for the samples.

EPA stated that if, at any time, any of the information received or collected by EPA was construed as confidential business information (CBI) the Owner/Operator should let EPA know and they would identify it as CBI information and it would be handled as such. The Owner/Operator did not request any of the photos or information in the checklist to be marked CBI.

If photographs or documents were taken, does the facility consider any to be Confidential Business Information (CBI)?	No
Which information does the facility consider to be CBI?	No information was identified as confidential business information at the time of the inspection.

EPA vehicle parked in approved location?	Yes, according to the Owner/Operator.
Location where EPA vehicle was parked?	Northeast of the calf hutch area.
Disposable boots worn?	Yes.
Other bio-security measures taken (state vet contacted, etc.):	EPA received confirmation from the state veterinarian that there were no outbreaks of cattle diseases in the area and confirmed with the Owner/Operator that their cows had no diseases.

2.1 Records Review

Table 2: Documents

Checklist(s) Used
R5 CAFO Inspection Checklist
Facility Documents Reviewed:
2018 NMP Update.

Table 3: Facility Description

Type of Animal	**Number of Animals**	**Capacity**	**Type of Confinement**
Milking and Dry cows	478	Operator stated that is capacity	One large freestall barn and one small barn with feedlot.
Heifers 1100 lbs.	29	Operator stated that is capacity	Feedlot with barn.
Heifers <400 lbs./steers	98/62	Operator stated that is capacity	Feedlot with barn.
Minimum Number of Animals in previous 5 years:			Consistent with the number provided during the inspection.
Maximum Number of Animals in previous 5 years:			Consistent with the number provided during the inspection.
Number of Animals that are stabled/confined and/or fed/maintained for 45 days or more in previous 12 months:			478 milking and dry cows are maintained for 45 days or more in the previous 12 months.
Amount of Liquid Manure Generated per year:			The 2018 NMP provided for our review during the inspection listed 5,508,762

	million gallons of liquid manure generated.
Amount of Solid Manure Generated per year:	The 2018 NMP provided for our review during the inspection listed 465 tons of solid manure generated.
Does the facility have an NPDES Permit?	No.
SIC or NAICS code:	0241.
CAFO Designation/Defined Date (If a designated CAFO)	Prior to the inspection, Greenleaf was not defined as a CAFO. During the inspection, EPA observed process wastewater from the production area that had come into contact with feed and manure discharging through a man-made conveyance to the unnamed tributary of the East River.
CAFO Designation/Defined Reason (If a designated CAFO)	During the inspection, EPA observed process wastewater from the production area that had come into contact with feed and manure discharging through a man-made conveyance to the unnamed tributary of the East River.
Do animals have direct access to WOUS?	No, the animals are confined to barns and attached feedlots.
Are crops, vegetation, forage growth, or post-harvest residues sustained in the normal growing season over any portion of the lot or facility where animals are kept?	No.
What is the area (acres) of the production area?	The Owner/Operator did not know the number of acres of the production area.
What is the area (acres) of the pasture?	No pasture.
How many employees (not counting family members)?	7
Other facilities under common ownership (name and address): None.	

Table 4: Livestock Waste Storage

Type of Storage	Storage Capacity	Type of Liner	Depth Markers Present	Last Time Waste was Removed	Amount of Waste Removed	Days of Storage
Sand Settling Pit (Old Pit)	1.5 million gallons	Earthen	None	November 2018	The Owner/Operator stated that he had this information, but it was not provided to EPA at the time of the inspection.	The Owner/Operator was not sure for this structure alone the days of storage.
New Pit	8.8 million gallons	Earthen	None	November 2018	The Owner/Operator stated that he had this information, but it was not provided to EPA at the time of the inspection.	The Owner/Operator was not sure for this structure alone the days of storage.
Reception Pit	20(wide)x60(long x10(deep)	Concrete	None	Weekly	The Owner/Operator stated that he had this information, but it was not provided to EPA at the time of the inspection.	The Owner/Operator was not sure for this structure alone the days of storage.
Total storage for all manure storage structures for the year:				1 year 5 months		
Records at site of storage structure design?				The Owner/Operator stated that EPA can obtain this information from either WDNR or Brown County, Wisconsin. WDNR agreed that EPA should be able to get this information from one or both of the agencies.		
Is manure stored for the short term? If yes, describe where it is stored, how it is drained and where it drains to.				Not at the time of the inspection, but if short-term storage of solids would be needed headland stacking could be utilized.		

Are records kept of the level of manure in the storage structures?	No.
When was the last time a storage structure was emptied, either partially or completely?	The Old Pit and New Pit were partially emptied in November of 2018.
What amount of manure or process wastewater was removed the last time the storage structure was emptied, either partially or completely?	The Owner/Operator was not able to provide this information during the inspection.
Do the facility personnel inspect and keep records of all diversion devices?	No.
Do the facility personnel inspect and keep records of all impoundments?	No.
Do the facility personnel inspect and keep records of all the water lines?	No.
Do the facility personnel perform routine visual inspections and keep records of the production area?	Yes, visual checks are done daily at the facility, but no records were kept.
Does the waste storage system have a managed outfall or discharge point?	No.
Has the facility had any documented discharges of livestock waste to surface water in the past year?	No, according to the Owner/Operator of Greenleaf.
Are there safety devices installed around any manure storage ponds? (Barriers at the end of manure push off platforms, fences around pond, signage.)	No.
Additional Information:	No, additional information was asked or provided by the Owner/Operator of Greenleaf.

Table 5: Livestock Waste Management

Describe the way manure is collected and disposed of at the facility:
In the Milking and Dry Cow Barn a skid steer pushes the used bedding, manure and spilled water from the cow waterers into the reception pit located in the Milking and Dry Cow Barn. The manure and process wastewater in the Reception Pit is manually pumped to the sand settling pit (Old Pit) two times per day. The manure and process wastewater in the Old Milking Cow Barn is collected with a skid steer and pushed to the reception pit in the Milking and Dry Cow Barn. To clean the barn with the calves <400 lbs. and steer, a skid steer is used to scrape manure and bedding to an underfloor pit in the <400 lb. calf barn and steer which is pumped to the reception pit. Calf hutch area is scraped as needed and land applied if the fields are available for application or stored in the Milking and Dry Cow Barn.
Describe the way used bedding is collected and disposed of at the facility:
The facility uses sand as bedding and it is scraped with the manure to the reception pit and pumped to the Old Pit and land applied.

Are mortality records kept?	Yes, on Dairy.com program used by Greenleaf.
Describe the way mortalities are managed at the facility:	
The mortalities are put in a designated location on the farm. The Owner/Operator will contact Sandy Bay Mink farm and the mortalities are picked up the same day.	
What type of method is used to provide drinking water for the animals?	Float water system.
Describe the way spilled drinking water is collected and disposed of at the facility:	
Spilled drinking water is collected in the barns with the used bedding and manure.	
Describe the way mist cooling water is collected and disposed of at the facility:	
There are mist cooling systems in the Milking and Dry Cow Barn and in the holding area. The mist cooling water is collected with the used bedding and manure.	
Describe how chemicals are stored and how used or spilled chemicals are collected and disposed of at the facility:	
There is a separate room in the milking parlor building where teat dip and copper sulfate (kept in bags) are kept. If a spill from these chemicals were to occur, they would flow into the floor drain that flows to the reception pit that has to be manually pumped to the Old Pit.	
Describe the way water that has been used to wash/flush barns are collected and disposed of at the facility:	
The barns are not washed or flushed, they are cleaned out using a skid steer.	
Describe where water comes from that is used to clean and/or flush. (Wells, city, etc.)	
Well water is used to clean the milking parlor.	
Describe the way feed is contained and how runoff from feed is collected and disposed of at the facility:	
There is a pit in the northwest corner of the silage feed pad that collects the first flush of process wastewater from the silage feed pad. Once the pit has collected the designed amount of process wastewater, all the remaining process wastewater bypasses the pit and flows to the VTA. The pump in the pit in the northwest corner of the silage feed pad is on a timer to only pump into the New Pit when the timer goes off. At the time of inspection, EPA observed a pool of process wastewater in the northwest corner of the silage feed pad bypassing the pit and flowing through a channel in the VTA and discharging into the unnamed tributary of the East River. EPA observed the outfall pipe into the New Pit, which had no wastewater flowing out of it at the time of the inspection.	
If a dairy, describe how process wastewater from the plate cooler water is collected and disposed of at the facility:	
One hundred percent of the plate cooler is used to water the cows.	

If a dairy, describe how process wastewater from the cleaning of the milking parlor is collected and disposed of at the facility:	
The process wastewater generated from the cleaning of the milking parlor goes into the reception pit, which is pumped to the Old Pit.	
If a dairy, describe how process wastewater from the cleaning of the milk tanks is disposed of at the facility:	
The process wastewater from the cleaning of the milk tanks goes into the reception pit and is pumped to the Old Pit.	
If a dairy, how many times per day are cows milked?	Three times per day.

Table 6: Land Application and Disposal of Manure and Process Wastewater

Does the facility perform and keep records of the manure testing?	Yes, the Owner/Operator stated manure samples are collected from the pits two time per year in the fall and spring.
When was the last time a sample was taken of the manure and/or process wastewater?	The CO-OP, a United States Department of Agriculture Cooperative Service collected a sample in November of 2018 when pumping from the Old Pit and New Pit.
Describe the process to take the manure and/or process wastewater sample.	The CO-OP takes a sample at Greenleaf in the Old and New Pits when they are being pumped out.
Number of acres available for land application:	The total acres documented in the 2018 NMP were 609. According to the Owner/Operator, SnapPlus should have the available land for manure application, but EPA did not see this information on the day of the inspection.
Are land application records kept?	Yes, according to the Owner/Operator, but EPA did not see these records during the inspection.
Who applies the manure and process wastewater to the fields?	Greenleaf hires Gruett's Inc. Hauling in Potter, Wisconsin along with other companies to haul and apply manure.

Are weather conditions at time of application kept? (24 before – 24 after)	Weather conditions are taken, but not documented before land application. Weather conditions are not recorded or taken 24-hours before or 24-hours after.
Does the facility perform and keep records of the soil testing?	Yes, on all fields, but this information was not viewed during the inspection.
Is manure transferred off-site to another party?	No.
Are manure transfer records maintained?	NA.
Do facility personnel perform periodic inspection of land application equipment?	Greenleaf does not own equipment but hires other hauling companies to apply its manure and process wastewater.

Table 7: Receiving Surface Waters

Describe the surface flow pathways:	
Greenleaf has stormwater pathways that flow through the production area coming from the east and from crop fields to the south. The stormwater merges with process wastewater collected in the dredged ditch in Greenleaf's production area. The flow from the dredged ditch and the stormwater pathways merge north of the Milking and Dry Cow Barn and flow north through a culvert that conveys the stormwater and the process wastewater. The flow continues on the north side of Day Street through a grassed waterway that discharges to the unnamed tributary of the East River. The Owner/Operator stated there is year-round flow in the unnamed tributary to the East River, but the flow is minimal in August.	
How many months out of the year is there flow in the nearest surface water pathway:	12 months of the year.
Are there any storm water pathways entering the facility?	Yes, there are multiple stormwater pathways that enter from the south and east sides of the production area of Greenleaf.
Are there any clean water ponds on site?	No, there are no clean water ponds located on the production area of Greenleaf.
What is the name of the first waterway that is identified as a Traditional Navigable Water (TNW) for surface flow from the facility?	East River.
Is the surface water pathway nearest to the facility considered to be ephemeral, intermittent or perennial?	Perennial.

Has the surface water pathway nearest to the facility been assessed for water quality?	The WDNR representative thought that the unnamed tributary was assessed along with the Lower Fox Total Maximum Daily Load.

Table 8: Nutrient Management Plan

NMP on site?	2018 NMP Update was on-site.
Date NMP Submitted:	It did not have a day or month, just a year, 2018.
Planner Name/Company:	Kevin Beckard, Ag Source Laboratory
Date that the NMP was last updated:	Just the year, 2018.
Storage Description:	It was not in the 2018 NMP that EPA viewed during the inspection.
Amount of Manure Generated:	EPA noted that the 2018 NMP listed 5,508,762 million gallons of liquid manure and 465 tons of solid manure generated in the last year.
Capacity of Storage:	The Owner/Operator was not able to provide this information during the inspection.
Duration of Storage:	The Owner/Operator stated that there was approximately 1 year 5 months of total storage.
Amount of Spreadable Land:	The Operator was not able ot provide this information during the inspection.
Mortality Management Plan:	No plan, but the Owner/Operator described the process of how mortalities are managed at Greenleaf.
Clean Water Diversion System:	No plan, but the Owner/Operator described the process of how clean water is diverted.
Direct Contact Prevention Plan:	No plan, but the Owner/Operator described how animals are confined, so that they don't come into contact with waterways.
Chemical Management Plan:	No, but the Owner/Operator described where the chemicals are kept and if a spill occurred how it could be contained prior to discharging into the Old Pit.
Conservation Practices:	These practices are done for the fields in SnapPlus, which was not viewed during the inspection.
Manure Testing Protocols:	EPA did not view any manure testing protocols, but the Owner/Operator explained that samples are collected by the CO-OP at the production area when the pits are being pumped out.
Soil Testing Protocols:	The Owner/Operator explained that soil testing was being done but EPA did not view the protocols during the inspection.

Land Application Protocols:	The Owner/Operator described that setbacks and timing are listed in SnapPlus, but there is not written protocol for land application.
Additional NMP comments:	No other comments were provided.
Does the NMP reflect the current operational characteristics?	EPA did not see plans of how the production area was to be managed in the 2018 update.
Are the number of acres owned/leased consistent with what is listed in the NMP?	EPA did not have any information to use to compare to the total acres identified in the NMP.

Table 9: Land Application Records (details of the records reviewed)

Fields available for application this year:	The Owner/Operator had maps for the land application in the NMP 2018 update, but EPA did not review the maps to determine if all the field maps were in the NMP.
Timing limitation on fields:	This is done in SnapPlus.
Annual manure analysis for N and P	The Owner/Operator stated that this was done twice a year in the spring and fall, but EPA did see or view these records.
Soil tests for fields (for P) less than 5 years old?	The Owner/Operator stated that the fields are tested every three years, but EPA did not see or view the records.
Inspection of land application equipment documentation:	According to the Owner/Operator, this is done by the contracted haulers on their own equipment.
Crop:	According to the Owner/Operator, this is done in SnapPlus.
Application Rate:	According to the Owner/Operator, this is calculated in SnapPlus.
Crop Yield Goals:	This is in SnapPlus.
Timing of land application:	This is in SnapPlus.
Method of land application:	Mostly incorporation.
Additional land application information:	No, additional information provided or shared with EPA at the time of the inspection.

Table 10: Facility Records (details of the records reviewed)

Diversion devices:	EPA did not observe any diversion device records or plans.
Impoundments:	No records were kept for the impoundments.
Depth marker observations:	There were no depth markers in the storage structures.

Water Lines:	No water line records were kept.
Mortality handling:	EPA did not observe any documents on the number of mortalities. However, the Owner/Operator stated that this information is put into a program called Dairy.com.
Storage Structure Design:	The Owner/Operator did not provide storage structure design records for EPA's review during the inspection.
Overflow records:	The Owner/Operator stated that they did not have any documented overflows.
Crop Yields:	EPA did not review any of this information in SnapPlus.
Land Application Dates:	EPA did not review land application dates for manure and/or process wastewater application.
Weather Conditions at time of application (24 before-24 after):	The Owner/Operator did not record this information.
Test Methods for Manure Testing:	EPA did not review the test methods that Greenleaf used for manure testing.
Test Methods for Soil Testing:	EPA did not review the soil testing methods.
Manure Test Results:	EPA did not review manure test results.
Soil Test Results:	EPA did not review soil test results.
Calculations of N and P applied:	EPA did not review calculations of N and P applied to Greenleaf's fields.
Application Methods:	EPA did not review application methods.
Application Equipment Inspection Dates:	The Owner/Operator hired out the land application and does not have land application equipment.

Table 11: NPDES Permit

Type of permit (General, individual)	Greenleaf did not have a state or federal permit.
Is a copy of the permit on site?	NA.
Date that the permit was issued:	NA.
Date that the permit will expire:	NA.
Permitted number of animal units:	NA.
Does the permit contain a compliance schedule? If yes, provide a detailed description of the requirements and the status.	NA.
Have there been any changes made to the production area since the permit	NA.

was issued? If yes, provide a detailed description.	
Are there any practices in the permit that are not being done at the facility?	NA.

2.2 Walkthrough of the Facility

EPA completed the Region 5 CAFO Checklist and stated that they would like to conduct the walk-through of the facility. Prior to the walk-through it had rained, but as EPA started the walk-through it was overcast, but not raining. The Owner/Operator stated that EPA could walk on the north side of the Old Milking Cow Barn and the Milking and Dry Cow Barn to observe the dredged ditch and then EPA could follow him in their vehicle to the silage feed pad to observe the silage feed pad and VTA. EPA then proceeded to observe the dredged ditch between the Milking and Dry Cow Barn and the Old Milking Cow Barn. EPA observed that the ditch appeared to have been dredged recently. The Owner/Operator stated that it had been dredged to clean it out and remove built up solids. EPA observed runoff from feed flowing into the dredged ditch (P5090001, P5090003). EPA observed clean sand on the outside of the northeast corner and center of the Milking and Dry Cow Barn (P5090004). EPA observed the process wastewater within the dredged ditch flow through a culvert inlet and through the culvert oulet to the northeast (P5090005). EPA observed the flow continue where it merged with stormwater from the east flowing to the west. EPA observed the combined flow of stormwater and process wastewater continue north.

EPA and WDNR were told by the Owner/Operator to follow him in our vehicle to the silage feed pad. At the silage feed pad, EPA observed water pooled in the northwest corner of the silage feed pad (P5090009). EPA observed exposed feed on the silage feed pad and that the feed had mixed with the stormwater on the silage feed pad. The silage feed pad was sloped, so that flow on the silage feed pad would flow toward the northwest corner (P5090015-P5090018). EPA, WDNR, and the Owner/Operator walked to the pooled water in the northwest corner of the silage feed pad and observed the concrete spreader bar and gravel stone placed against the spreader bar (P5090010-P5090011). EPA observed what appeared to be excavator marks within the VTA north of the spreader bar as well as what appeared to be freshly placed gravel stone. EPA asked if the gravel stone had recently been placed. The Owner/Operator stated that the gravel stone was not fresh and had always been there. EPA observed the process wastewater from the silage feed pad flowing through the spreader bar and the stone and channeled through the VTA (P5090012). The process wastewater flowed through the VTA toward the northwest corner of the VTA and then created a channel down the embankment to the west into the unnamed tributary of the East River (P5090013 and P5090014).

EPA proceeded to label bottles and gather the equipment to collect samples at the northwest corner of the VTA at the top of the embankment of the unnamed tributary of the East River. As EPA was collecting samples, the Operator/Owner's wife was video recording EPA collecting the samples (P5090019-P5090021). After collecting samples at

the northwest corner of the VTA, EPA preserved the samples and then followed the Owner/Operator back to the parking location northeast of the calf hutch area.

EPA, WDNR and the Owner/Operator walked to the dredged ditch and explained that stormwater was mixing with the feed that was fed to the cows in the feedlot attached to the Old Milking Cow Barn and flowing into the dredged ditch, which flows through culverts to a grassed waterway on the north side of Day street and discharges into the unnamed tributary of the East River.

EPA said they were going to collect a sample from the culvert outlet on the north side of the access road north of the Milking and Dry Cow Barn. EPA labeled the bottles and gathered the necessary equipment to collect samples from the culvert outlet north of the access road north of the Milking and Dry Cow Barn (P5090022-P5090023). The Owner/Operator's wife video recorded EPA collecting the samples from the culvert.

As EPA was preserving the samples from the culvert outlet (S02), EPA's attorney called and stated that he had spoken to a person from Mr. Crass's law firm who stated that they would not have told the Owner/Operator to deny EPA access to the production area. EPA's attorney suggested EPA inform the Owner/Operator that he may want to contact his attorney and discuss what was said. Prior to the Owner/Operator calling his attorney, EPA explained they were going to drive their vehicle and park alongside Day Street to observe the grassed waterway to the north of the calf hutch area south of Day Street. The Owner/Operater stated that he was okay with EPA and WDNR walking the grassed waterway in the alfalfa field north of the calf hutch area.

EPA observed that water from the north side of the production area flowed through the grassed waterway in the alfalfa field to the roadside ditch on the south side of Day Street (P5090024-P5090026). EPA observed the water flowing west in the roadside ditch, under the dead vegetation, toward the unnamed trbutary of the East River (P5090027-P5090033). As EPA and WDNR walked west and closer to the unnamed tributary of the East River, the water flowing in the roadside ditch became more channeled. EPA observed the flow in the roadside ditch discharging into the unnamed tributary of the East River (P5090034-P5090041). EPA and WDNR then walked back to the grassed waterway and walked the grassed waterway to the south and observed flow from a culvert that conveyed flow under the concrete pad of the calf hutch area and surface flow from the calf hutch area flowing into the grassed waterway (RIM0093-RIM0107).

As EPA was observing the grassed waterway north of the calf hutch area, the Owner/Operator asked EPA what other areas within the production area that they needed to walk-through. EPA explained that they wanted to also walk around the barns, the Old Pit and the New Pit, and the silage feed pad. The Owner/Operator said that it would be okay for EPA to walk-through these areas. EPA said that they were going to collect a sample from the grassed waterway that came from the surface flow and the culvert outlet from the calf hutch area (RIM0108-RIM 0109). EPA gathered the sampling equipment and collected and preserved the samples and asked the Owner/Operator to choose their

set of samples. EPA then parked on the northwest side of the production area and began the walk-through of the remaining areas of the production area.

EPA, WDNR, and the Owner/Operator started the remaining walk-through on the east side of the Milking and Dry Cow Barn and walked to the south (RIM0110-RIM011) (RIM0112). EPA observed used bedding on the concrete apron on the southwest corner of the Milking and Dry Cow Barn that had come into contact with stormwater. EPA observed that the process wastewater from this area flowed to the north on the west side of the Milking and Dry Cow Barn toward a culvert inlet that flowed under the cow walkway (RIM0113-RIM0114). EPA observed the Heifer and Steer Barn with the attached open feedlot had manure and process wastwater flowing off of the open feedlot to the northeast and into a ditch that flowed to the north through a culvert inlet that conveyed flow under the cow walkway to the the dredged ditch between the Old Milking Cow Barn and the Milking and Dry Cow Barn that was discussed in the report previously (RIM0116).

EPA, WDNR, and the Owner/Operator continued to walk to the west. EPA observed stormwater run-on from south and southwest from the agriculutral fields and the silage feed pad to the southwest. The stormwater flowed to the northeast through the production area of Greenleaf toward the Heifer and Steer Barn with the attached open feedlot (RIM0116). EPA,WDNR, and the Owner/Operator continued to walk west toward the Old and New Pit where they began the walk-around of the New Pit and Old Pit on the east side of pits near the center. EPA, WDNR, and the Owner/Operator walked south on the east side of the berm of the New Pit (RIM0117-RIM0119).

As EPA, WDNR, and the Owner/Operator walked south, EPA observed exposed feed on the southeast silage feed pad located southeast of the New Pit (RIM0121). EPA, WDNR, and the Owner/Operator walked south on the east berm of the New Pit and came around the south end of the New Pit to the west berm and walked north on the west berm (RIM0123). EPA observed two rodent holes in the west berm of the New Pit (RIM0124-RIM0125). EPA, WDNR, and the Owner/Operator continued to walk north on the west berm of the New Pit and observed a pipe in the New Pit. EPA asked the Owner/Operator if the pipe was from the pit in the northwest corner of the silage feed pad, Owner/Operator said it was. EPA did not observe flow coming out of the pipe into the New Pit (RIM0126).

EPA,WDNR, and the Owner/Operator walked between the New Pit and the Old Pit and observed the channel, between the two pits. The Owner/Operator stated that the channel had a concrete bottom (RIM0128) and was designed to convey the liquid from the Old Pit to the New Pit, but not the solids. EPA did not observe any depth markers in either the New or Old Pits.

EPA drove to the culvert oultet on the south side of Day Street that conveyed flow from Greenleaf's production area under Day Street. EPA observed the grassed waterway that flowed to the northeast to the unnamed tributary of the East River (RIM0129-RIM-0130).

2.3 Closing Conference and Post-Inspection

EPA walked back to their car and explained the areas of concern to the Owner/Operator:

1. The silage feed pad had process wastewater bypassing the pit in the northwest corner of the silage feed pad and was flowing into and through the VTA and discharging to the unnamed tributary of the East River.

2. The feed that was fed to the cows in the Old Milking Cow Barn feedlot on the north side of the production area came into contact with stormwater. The process wastewater was flowing into the dredged ditch and was flowing through culverts that conveyed flow to a grassed waterway on the north side of Day Street that discharged into the unnamed tributary of the East River.

3. The Heifer and Steer Barn with the attached open feedlot lacked containment to collect process wastewater flowing off of the open feedlot and was flowing through a culvert inlet into the dredged ditch between the Old Milking Cow Barn and the Milking and Dry Cow Barn and continuing through culverts that conveyed the flow to the north side of Day Street into a grassed waterway that discharges to the unnamed tributary of the East River.

4. Process wastewater from the calf hutch area was flowing to the north through surface flow and through a culvert outlet to a grassed waterway in the alfalfa field to the north and flowed into the roadside ditch on the south side of Day Street. The process wastewater flowed in the roadside ditch to the west and discharged into the unnamed tributary of the East River.

EPA explained that it will take approximately 70 days to get the inspection report which inlcudes the sampling results. EPA provided a business card with contact information in case the Owner/Operator had any questions while waiting for the report. Cheryl Burdett's contact information was provided on the business card given to the Owner/Operator.

Were specific Areas of Concern discussed with facility personnel?	Yes.
Who were the Areas of Concern discussed with? The Owner/Operator and his wife.	
Exit Time:	14:25.
Disposable Boots Left at Facility?	Yes.
Vehicle Washed after leaving facility?	Yes.
Date and time vehicle was washed:	May 9, 2019/ 15:34.

Table 12: Sampling Information

Were samples taken?	Yes.
Were samples split with facility?	Yes.
Number of sample locations taken?	Three.
Was a trip blank created (done prior to entering the facility)?	Yes.

Identify which sample is the trip blank.	B01.
Were field duplicate samples taken (1 duplicate per 20 samples)?	No.
Identify which sample(s) is/are the field duplicate(s)	NA.
Were equipment blanks taken (if more than one type of equipment was used to collect samples)?	No.
Identify which samples were equipment blanks.	NA.
Location where samples were preserved:	At Greenleaf.
Name of people involved with sample preservation:	Ben Atkinson and Cheryl Burdett
Were samples shipped to a lab?	Fecal Coliform samples were hand-delivered to Pace Laboratory in Green Bay, Wisconsin. The nutrient and general chemistry samples were shipped to Region 5, Chicago Regional Laboratory.
Name/Address of shipping location:	UPS Office in Green Bay, Wisconsin.
Date and time that samples were dropped off for shipping:	Samples were shipped before 17:00 at UPS.
Did all inspectors involved with the sampling sign the chain of custody?	Yes.
Weather conditions at the time of sample collection:	Overcast.

Name of Laboratory where fecal coliform/E.coli samples were taken:
PACE Laboratory Green Bay, Wisconsin.

Name of Laboratory where nutrients and general chemistry samples were taken:
Region 5, Chicago Regional Laboratory Chicago, Illinois.

Documents taken from the facility:
No documents were taken from Greenleaf.

Table 14b: Facility Sample Information

Number	Name	Date	Time	Collector	Photo #	Photographer	Method of Collection	TKN mg/L	Total P mg/L	TDS mg/L	TSS mg/L	BOD-5-day mg/L	Ammonia as Nitrogen mg/L	Nitrate - Nitrite mg/L	*E. coli* CFU/ 100 mL
S01	VTA Runoff	5/9/2019	11:53 AM	Cheryl Burdett	P5090019 and P5090020	Ben Atkinson	Grab	26.3	10.5	656	154	190	5.08	0.05	6400000
S02	Culvert Outlet	5/9/2019	12:18 PM	Ben Atkinson	P5090021-P5090023	Cheryl Burdett	Grab	26.0	5.65	860	226	150	6.84	1.26	109000
S03	Tile Calf Hutch	5/9/2019	1:34 PM	Ben Atkinson	RIMG0108 and RIMG0109	Cheryl Burdett	Grab	40.3	6.73	960	180	73	25.8	8.35	450000
B01	Greenleaf Farm	5/9/2019	12:37 PM	Cheryl Burdett	No Photos	NA	Grab	U	U	U	U	U	U	U	No blank taken

TKN – total kjeldahl nitrogen (mg/L)
Total P– total phosphorus (mg/L)
TDS – total dissolved solids (mg/L)
TSS – total suspended solids (mg/L)
BOD 5-day – Biochemical Oxygen Demand 5 day
NA- Not applicable – no blank was done for *E.coli.*

Name of Laboratory where fecal coliform/E.coli samples were taken: PACE Analytical Laboratory in Green Bay, Wisconsin
Name of Laboratory where nutrients and general chemistry samples were taken: CRL Laboratory in Region 5, EPA
Additional laboratory notes:

List of Attachments:

A. Photo Log
B. Labeled Aerial Photo of Greenleaf
C. Sampling Results from Pace Analytical and Region 5 CRL Laboratory